



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:)	Before the Examiner:
Young et al.)	Jerry L. Cumberledge
)	
Application Serial No.: 10/695,068)	Group Art Unit: 3733
)	
Filed: October 28, 2003)	Ref. No.: MSDI-1006/PC767.01
)	
MULTI-AXIAL, CROSS-LINK)	
CONNECTOR SYSTEM FOR SPINAL)	
IMPLANTS)	

**DECLARATION OF PRIOR INVENTION IN THE UNITED STATES
TO OVERCOME CITED PATENT OR PUBLICATION (37 C.F.R. §1.131)**

We, J. Stewart Young, Tommy Carls and Chris Johnson, hereby declare as follows:

1. We are each listed as a joint inventor of the subject matter disclosed and claimed in the subject patent application (hereafter the "Invention").
2. This Declaration is being provided to establish a date of conception and reduction to practice of the Invention in the United States on a date prior to May 9, 2002, which is the purported effective filing date of U.S. Patent No. 6,699,248 to Jackson. Jackson was cited in a non-final Office Action mailed to the Applicants on June 26, 2008 in the subject patent application.
3. On a date prior to May 9, 2002, the Invention was conceived of by the joint inventors.
4. On a date prior to May 9, 2002, the Invention was successfully reduced to practice in the United States.
5. To evidence conception and reduction to practice of the Invention, attached hereto is an Invention Disclosure that includes drawings and a description of the Invention which correspond to the subject matter disclosed and claimed in the subject patent application. The dates listed on the Invention Disclosure have been blacked out, as well as dimensional data associated with the Invention. However, we declare that the "Date Conceived" and the "Date Constructed" listed on the Invention Disclosure occurred prior to May 9, 2002.

6. On a date prior to May 9, 2002 and shortly after the Invention was reduced to practice, the Invention was tested in the United States.

7. We declare that the "Date First Tested" listed on the Invention Disclosure occurred prior to May 9, 2002.

8. Shortly after construction and testing of the Invention, the Invention Disclosure was forwarded to the law firm of Woodard, Emhardt, Naughton, Moriarity & McNett for preparation of a patent application.

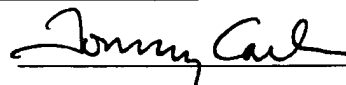
9. U.S. Provisional Patent Application No. 60/421,701 disclosing the Invention set forth in the Invention Disclosure was filed on October 28, 2002. The subject patent application disclosing and claiming the Invention set forth in the Invention Disclosure was filed with the U.S. Patent and Trademark Office on October 28, 2003 and claims priority to U.S. Provisional Patent Application No. 60/421,701.

10. The undersigned, being hereby warned that willful false statements and the like are punishable by a fine or imprisonment, or both (18 U.S.C. §1001), and may jeopardize the validity of the application or any patent issuing thereon, declares that all statements made of her own knowledge are true and that all statements made on information and belief are believed to be true.


WITNESS Declarant's hand this 18th day of NOVEMBER, 2008.


J. Stewart Young

WITNESS Declarant's hand this 18 day of November, 2008.


Tommy Carls

WITNESS Declarant's hand this 6 day of January, ²⁰⁰⁹~~2008~~ 2009 ²⁰⁰⁹~~2008~~.


Chris Johnson

**Medtronic****SOFAMOR DANEK**

PC695.10

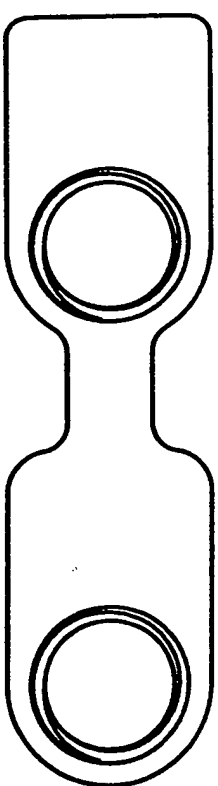
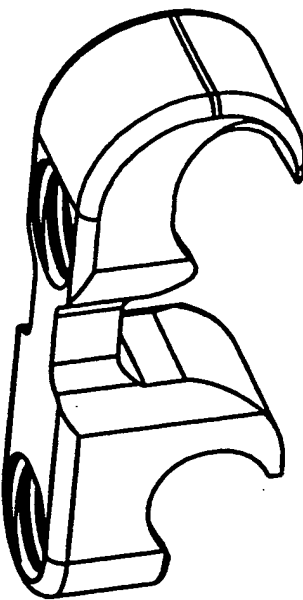
Title of Invention Optimized Rod Interconnection for spinal implants			Project No. or Name Low Profile CROSSLINKS
Inventor(s) Tommy Carls, Chris Johnson, Stewart Young			Eng. Notebook No. & Pages
Date Conceived [REDACTED]	Date Constructed [REDACTED]	Date First Tested [REDACTED]	Date Disclosed Outside Company [REDACTED]

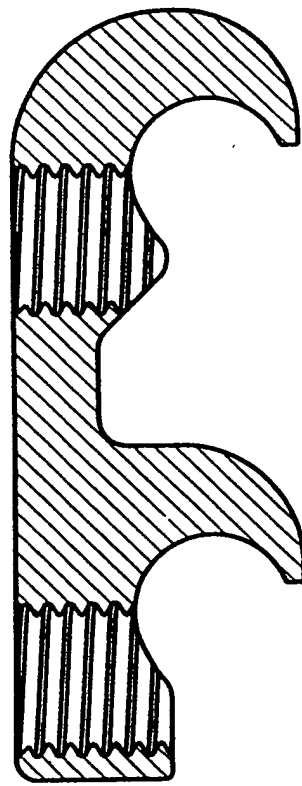
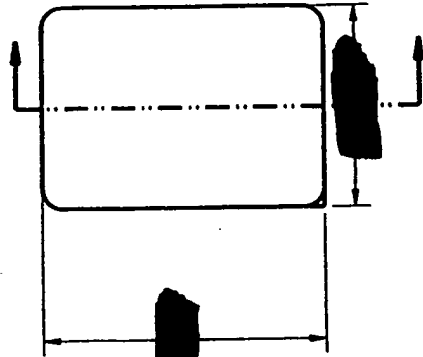
- Describe what is new or different about the subject matter of this invention: The taper on the outside of the connector allows for increased bone graft at the fusion site. Also, the curve in the rod saddle allow the connector to meet the rod at angles other than 90 degrees. Though shown on a Low Profile Crosslink, these features could possibly be used on other types of implant as well (hooks, screws, etc.).
- Advantages of this invention over what was done before and problems solved: This disclosure discusses two additions to an implant design, and could be implemented separately or together. First, the taper, by reducing the amount of metal below the axis of the rod is thought to allow an increased volume of bone graft. Several papers are out or will be coming out soon pointing at transverse connectors as a source of pseudoarthrosis due to the notch in the graft bed, and this helps address that issue. Next, the curve in the back of the rod saddle allows for an rod/implant interconnection at an angle other than 90 degrees, reducing contouring and speeding up implantation.
- Describe your idea on attached sheets, providing whatever drawings or other sketches are necessary to completely describe the idea. Copies of engineering notebook sheets may be provided. All addendum sheets must be signed, witnessed and dated.

Inventor (Print/Type) Tommy Carls Address: 986 River Currents Drive Memphis, TN 38103 Citizenship: USA Signature [REDACTED] Date [REDACTED]	Witness (Print/Type) Barry Null Read, Witnessed and Understood Signature [REDACTED] Date [REDACTED]
Inventor Chris Johnson Address: 7174 WICKSHIRE GERMANTOWN, TN 38138 Citizenship: USA Signature [REDACTED] Date [REDACTED]	Witness (Print/Type) Craig Squires Read, Witnessed and Understood Signature [REDACTED] Date [REDACTED]
Inventor STEWART YOUNG Address: 1611 PAGE COVE MEMPHIS TN 38119 Citizenship: USA Signature [REDACTED] Date [REDACTED]	Signature Approval President, Technology Development [REDACTED]
Inventor Address: Citizenship: Signature Date	Signature Approval President, Thoracolumbar [REDACTED]

Handwritten: [Redacted] 1/9/02 Tommy Carl

REV	DESCRIPTION	DATE	BY
A	NEW ITEM	1/17/82	JST

FINAL DRAWING

<p>8115514/5520-01</p>		<p>8115514/5520-01</p>	
<p>DESCRIPTION</p>		<p>CROSSLINK WITHOUT TAPER</p>	
<p>FINISH</p>		<p>DEBURR 1; ANODIZE</p>	
<p>SCALE</p>		<p>2:1</p>	
<p>DATE</p>		<p>1/17/82</p>	
<p>BY</p>		<p>JST</p>	
<p>APPROVED</p>		<p>DATE</p>	
<p>CHK BY</p>		<p>DATE</p>	
<p>TEST ENG</p>		<p>DATE</p>	

Medtronic
SOFAMOR DANEK

1100 PHILADELPHIA PLACE, BETHESDA, MD 20814 U.S.A.
TEL: 301-261-3113 FAX: 301-261-3115

1100 PHILADELPHIA PLACE, BETHESDA, MD 20814 U.S.A.
TEL: 301-261-3113 FAX: 301-261-3115

Medtronic
SOFAMOR DANEK

1100 PHILADELPHIA PLACE, BETHESDA, MD 20814 U.S.A.
TEL: 301-261-3113 FAX: 301-261-3115

1100 PHILADELPHIA PLACE, BETHESDA, MD 20814 U.S.A.
TEL: 301-261-3113 FAX: 301-261-3115

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DATE 11/17/82 BY JST

1. DO NOT SCALE DRAWING

2. REWORK ALL DIMENSIONS AND TOLERANCES TO MATCH DRAWING

3. 1/8" TYPICAL UNLESS NOTED

TOLERANCE UNLESS SPECIFIED IN MILLIMETERS

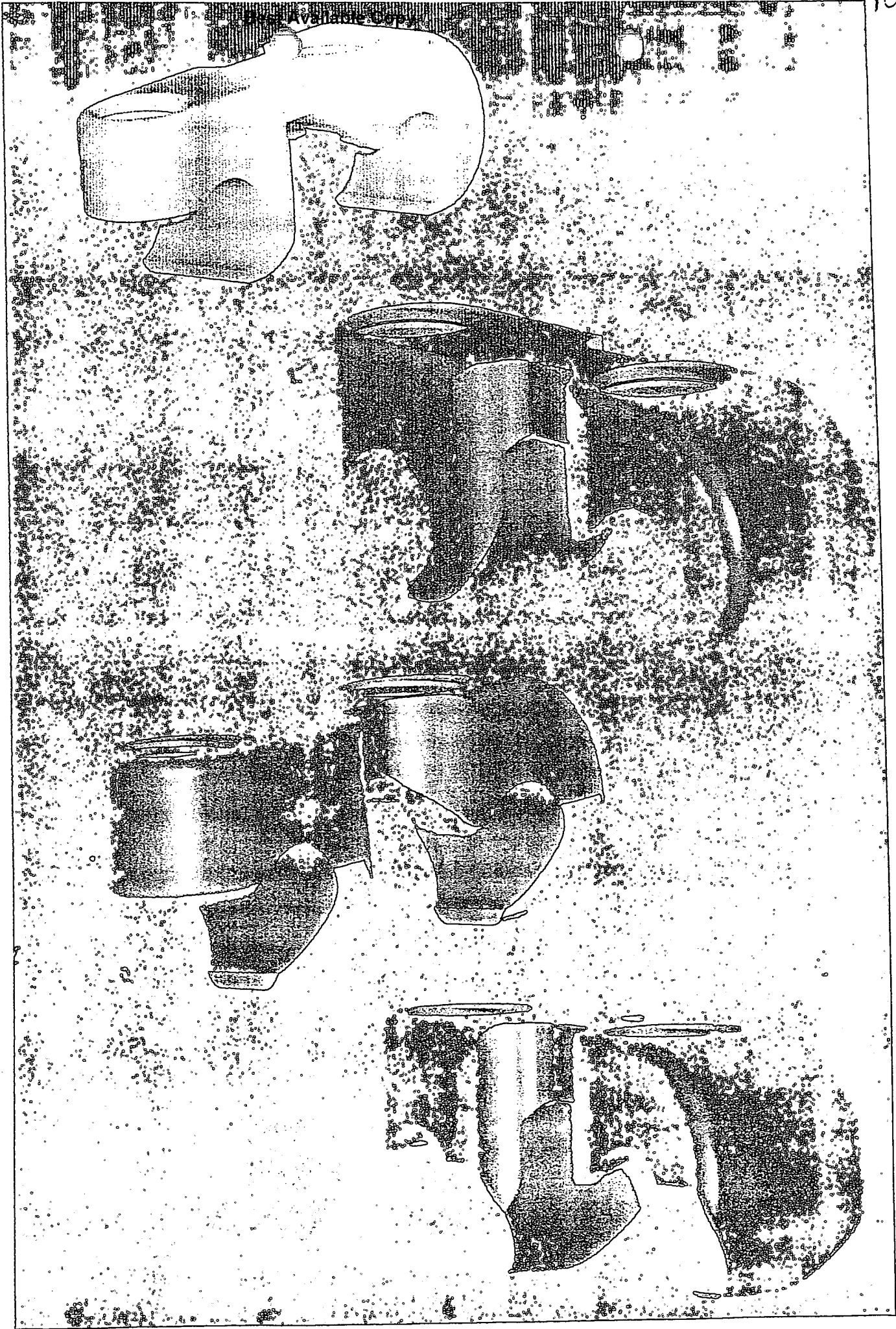
±0.1

UNLESS NOTED

THIRD ANGLE PROJECTION

CONTENTS OF THIS DRAWING ARE VALID ON THE MEDTRONIC SOFAMOR DANEK REPRESENTATION OF DATE 11/17/82

1225



[Redacted]

Tommy-Carl

[Redacted]

W. L. L.

[Redacted]

1.

[Redacted]

CM200125

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Best Available Copy

The image displays five distinct mechanical components, possibly aircraft hardware, arranged on a speckled background. The components are:

- A large, curved bracket or arm with a circular feature at one end and a hook-like shape at the other.
- A U-shaped bracket or arm with a circular feature at one end and a hook-like shape at the other.
- A small, hook-like piece with a circular feature at one end.
- A vertical bracket or arm with two circular features, one at the top and one at the bottom.
- A complex bracket or arm with multiple mounting points and a circular feature.

7. Wavy